SEQUENCE LISTING

GENERAL INFORMATION

(i)   APPLICANTS: DAKAI LIU
          RABBANI, ELAZAR

(ii)   TITLE OF INVENTION: VECTORS AND VIRAL VECTORS, AND PACKAGING CELL LINES FOR PROPAGATING SAME

(iii)   NUMBER OF SEQUENCES: 16

(iv)   CORRESPONDENCE ADDRESS:
      (A)   ADDRESSEE: ENZO THERAPEUTICS, INC.
      (B)   STREET: C/O ENZO BIOCHEM, INC.
                          527 MADISON AVENUE, 9TH FLOOR
      (C)   CITY: NEW YORK
      (D)   STATE: NY
      (E)   COUNTRY: USA
      (F)   ZIP: 10022

(v)   COMPUTER READABLE FORM:
      (A)   MEDIUM TYPE: 3.5" Micro Floppy Disk. 1.44 KB STORAGE
      (B)   COMPUTER: IBM PC/XT/AT, IBM PS/2 OR COMPATIBLES
      (C)   OPERATING SYSTEM: PC-DOS
      (D)   SOFTWARE: MICROSOFT WORD ___ - ASCII TEXT (DOS)

(vi)   CURRENT APPLICATION DATA:
      (A)   APPLICATION NUMBER: US 08/822,963
      (B)   FILING DATE: 21-MARCH-1997
      (C)   CLASSIFICATION: Not Yet Known

(vii)   ATTORNEY/AGENT INFORMATION;
      (A)   NAME: FEDUS, RONALD C.
      (B)   REGISTRATION NUMBER: 32,567
      (C)   REFERENCE/DOCKET NUMBER: ENZ-56

(viii)   TELECOMUNICATION INFORMATION
      (A)   TELEPHONE: (212) 583-0100
      (B)   TELEFAX: (212) 583-0150

(ix)   SEQUENCE DESCRIPTION: SEQ ID NO: 1:

(2)   INFORMATION FOR SEQ ID NO: 1
          (i)   SEQUENCE CHARACTERISTICS:

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     (A) LENGTH: 9 base pairs
     (B) TYPE: nucleic acid
     (C) STRANDEDNESS: double
     (D) TOPOLOGY: linear
  (ix) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

TATCACCGC
ATAGTGGCG

(3)   INFORMATION FOR SEQ ID NO. 2:
     (i) SEQUENCE CHARACTERISTICS:
     (A) LENGTH: 9 base pairs
     (B) TYPE: nucleic acid
     (C) STRANDEDNESS: double
     (D) TOPOLOGY: linear
  (ix) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

ACAAGAAAA
TGTTCTTTT

(4)   INFORMATION FOR SEQ ID NO. 3:
     (i) SEQUENCE CHARACTERISTICS:
     (A) LENGTH: 10 base pairs
     (B) TYPE: nucleic acid
     (C) STRANDEDNESS: double
     (D) TOPOLOGY: linear
  (ix) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

GTACTAGTTA
CATGATCAAT

(5)   INFORMATION FOR SEQ ID NO. 4:
     (i) SEQUENCE CHARACTERISTICS:
     (A) LENGTH: 8 base pairs
     (B) TYPE: nucleic acid
     (C) STRANDEDNESS: double
     (D) TOPOLOGY: linear
  (ix) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

AGACGTCT
TCTGCAGA

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(6)   INFORMATION FOR SEQ ID NO. 5:
                (i)   SEQUENCE CHARACTERISTICS:
                      (A)   LENGTH: 24 base pairs
                      (B)   TYPE: nucleic acid
                      (C)   STRANDEDNESS: double
                      (D)   TOPOLOGY: linear
            (ix)   SEQUENCE DESCRIPTION: SEQ ID NO: 5:

TGGAATTGTGAGCGGATAACAATT
ACCTTAACACTCGCCTATTGTTAA

(7)   INFORMATION FOR SEQ ID NO. 6:
                (i)   SEQUENCE CHARACTERISTICS:
                      (A)   LENGTH: 4 base pairs
                      (B)   TYPE: nucleic acid
                      (C)   STRANDEDNESS: double
                      (D)   TOPOLOGY: linear
            (ix)   SEQUENCE DESCRIPTION: SEQ ID NO: 6:

TAAT
ATTA

(8)   INFORMATION FOR SEQ ID NO. 7:
                (i)   SEQUENCE CHARACTERISTICS:
                      (A)   LENGTH: 9 base pairs
                      (B)   TYPE: nucleic acid
                      (C)   STRANDEDNESS: double
                      (D)   TOPOLOGY: linear
            (ix)   SEQUENCE DESCRIPTION: SEQ ID NO: 7:

CATGTAATT
GTACATTAA

(9)   INFORMATION FOR SEQ ID NO. 8:
                (i)   SEQUENCE CHARACTERISTICS:
                      (A)   LENGTH: 13 base pairs
                      (B)   TYPE: nucleic acid
                      (C)   STRANDEDNESS: double
                      (D)   TOPOLOGY: linear
            (ix)   SEQUENCE DESCRIPTION: SEQ ID NO: 8:

AAAAGTGTGACAT
TTTTCACACTGTA

(10)   INFORMATION FOR SEQ ID NO. 9:
                (i)   SEQUENCE CHARACTERISTICS:

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        (A)   LENGTH: 11 base pairs
        (B)   TYPE: nucleic acid
        (C)   STRANDEDNESS: double
        (D)   TOPOLOGY: linear
   (ix)   SEQUENCE DESCRIPTION: SEQ ID NO: 9:

CCGGAGGACAG
GGCCTCCTGTC

(11)   INFORMATION FOR SEQ ID NO. 10:
        (i)   SEQUENCE CHARACTERISTICS:
           (A)   LENGTH: 12 base pairs
           (B)   TYPE: nucleic acid
           (C)   STRANDEDNESS: double
           (D)   TOPOLOGY: linear
   (ix)   SEQUENCE DESCRIPTION :   SEQ ID NO: 10:

ACCGACGTCGGT
TGGCTGCAGCCA

(12)   INFORMATION FOR SEQ ID NO. 11:
        (i)   SEQUENCE CHARACTERISTICS:
           (A)   LENGTH: 6 base pairs
           (B)   TYPE: nucleic acid
           (C)   STRANDEDNESS: double
           (D)   TOPOLOGY: linear
   (ix)   SEQUENCE DESCRIPTION: SEQ ID NO: 11:

ATGATC
TACTAG

(13)   INFORMATION FOR SEQ ID NO. 12:
        (i)   SEQUENCE CHARACTERISTICS:
           (A)   LENGTH: 9 base pairs
           (B)   TYPE: nucleic acid
           (C)   STRANDEDNESS: double
           (D)   TOPOLOGY: linear
   (ix)   SEQUENCE DESCRIPTION: SEQ ID NO: 12:

GCGTGGGCG
CGCACCCGC

(14)   INFORMATION FOR SEQ ID NO. 13:
        (i)   SEQUENCE CHARACTERISTICS:
           (A)   LENGTH: 9 base pairs
           (B)   TYPE: nucleic acid

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                              (C)   STRANDEDNESS: double
                              (D)   TOPOLOGY: linear
               (ix)   SEQUENCE DESCRIPTION: SEQ ID NO: 13:

CAGAACATC
GTCTTGTAG

(15)   INFORMATION FOR SEQ ID NO. 14:
               (i)   SEQUENCE CHARACTERISTICS:
                      (A)   LENGTH: 8 base pairs
                      (B)   TYPE: nucleic acid
                      (C)   STRANDEDNESS: double
                      (D)   TOPOLOGY: linear
               (ix)   SEQUENCE DESCRIPTION: SEQ ID NO: 14:

TATATAAA
ATATATTT

(16)   INFORMATION FOR SEQ ID NO. 15:
               (i)   SEQUENCE CHARACTERISTICS:
                      (A)   LENGTH: 309 base pairs
                      (B)   TYPE: nucleic acid
                      (C)   STRANDEDNESS: single
                      (D)   TOPOLOGY: linear
               (ix)   SEQUENCE DESCRIPTION: SEQ ID NO: 15:

GAACAGATGG	AACAGCTGAA	TATGGGCCAA	ACAGGATATC	TGTGGTAAGC	1
AGTTCCTGCC	CCGGCTCAGG	GCCAAGAACA	GATGGAACAG	CTGAATATGG	51
GCCAAACAGG	ATATCTGTGG	TAAGCAGTTC	CTGCCCCGGC	YCAGGGCCAA	101
GAACAGATGG	TCCCCAGATG	CGGTCCAGCC	CTCAGCAGTT	TCTAGAGAAC	151
CATCAGATGT	TTCCAGGGTG	CCCCAAGGAC	CTGAAATGAC	CCTGTGCCTT	201
ATTTGAACTA	ACCAATCAGT	TCGCTTCTCG	CTTCTGTTCG	CGCGCTTCTG	251
CTCCCCGAGC	TCAATAAAA				301

(17)   INFORMATION FOR SEQ ID NO. 16:
               (i)   SEQUENCE CHARACTERISTICS:
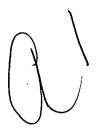   (A)   LENGTH: 309 base pairs
                      (B)   TYPE: nucleic acid
                      (C)   STRANDEDNESS: single
                      (D)   TOPOLOGY: linear

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(ix)   SEQUENCE DESCRIPTION: SEQ ID NO: 16:

ACGCTTGATC	CGGCTACCTG	CCCATTCGAC	CACCAAGCGA	AACATCGCAT	1
CGAGCGAGCA	CGTACTCGGA	TGGAAGCCGG	TCTTGTCGAT	CAGGATGATC	51
TGGACGAAGA	GCATCAGGGG	CTCGCGCCAG	CCGAACTGTT	CGCCAGGCTC	101
AAGGCGCGCA	TGCCCGACGG	CGAGGATCTC	GTCGTGACTT	TCTAGAGAAC	151
CATCAGATGT	TTCCAGGGTG	CCCCAAGGAC	CTGAAATGAC	CCTGTGCCTT	201
ATTTGAACTA	ACCGGTCAGT	TCGCTTCTCG	CTTCTGTTCG	CGCGCTTCTG	251
CTCCCCGAGC	TCAGCTGCG				

LC/WORD/USPROSECUTION/ENZ56/SEQUENCE LISTING.10.1.97

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